

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 - 22. (Canceled)

23. (Currently Amended) A sensing device for detecting an analyte in a fluid, said device comprising:

a first sensor element having a first sensor array for producing a response in the presence of said analyte;

a second sensing element having a second sensor array for referencing said system;

a computer coupled to said first and said second sensing elements having a resident algorithm,

wherein said first sensing element is physically located distinctly from said second element, and

wherein said second sensing element has attached thereto a pasivation layer.

24. (Canceled).

25. (Canceled).

26. (Currently Amended) The sensing device according to claim **[[25]]** 23, wherein said pasivation layer comprises a material that is a member selected from the group consisting of SiO₂ and SiO₂ based films.

27. (Original) The sensing device according to claim 26, wherein said SiO₂ based film is a member selected from the group consisting of thermal oxides, silane, SiH₄, tetraethoxysilane, Si(OC₂H₅)₄, silicate glasses, and spin on glass.

28. (Currently Amended) The sensing device according to claim **[[24]]** 23, wherein said first sensing element is in a first sample chamber and said second sensing element is in a second sample chamber.

29. (Currently Amended) The sensing device according to claim ~~[[24]]~~ 23, wherein said second sensing element has attached thereto a porous membrane layer.

30. (Original) The sensing device according to claim 29, wherein said porous membrane layer limits diffusion of said analyte.

31. (Currently Amended) The sensing device according to claim ~~[[24]]~~ 23, wherein said second sensing element is a reference element and sensing element is temperature controlled.

32. - 35 (Canceled).

36. (New) The sensing device according to claim 23, wherein said first sensing element does not have a pasivation layer attached thereto.